

Carl “The Axe” fails in the anti-dopingtest at UFC 890

Carl “The Axe”’s pre-examination tested positive for the presence of a genetically modified *Leishmania* in his blood. **Page 1**



Recall of Leishmania Centrin I-knockout batches


ANVISA suspends two lots of LeishMove, commonly used for inflammatory joint diseases treatments. **Page 2**

HIV virus can now revert acute myeloid leukemia

A new **EMBRYO** project is coming out from the Labs and being applied in hospitals as a revolutionary treatment to leukemia. **Page 3**

EMBRYO: The revolutionary platform that turns anyone into a potential scientist. Science and the population were never so close!

embryo



grow your ideas

After the huge success of its first project, “LeishMANIA: From pathogens to drug delivery systems” and promising projects that are already being discussed by local GMO’s’ organizations all over the world, the platform is currently developing 156 projects in collaboration with labs and enterprises in 52 countries.

The Brazilian initiative that started at first as a small project is today one of the most important companies on the science sector. Since the beginning, the platform has won three prizes in the innovation and technology field. The EMBRYO platform allows communication between the general public and scientists. The targeted projects are publicized in order to allow the participation of non-scientific minds in innovative projects, show where the public money is being invested and also to drive these new research ideas to the best direction.

Due to the wide dissemination and communication channel open to the public, Synthetic Biology has become well accepted and well understood in our society. Furthermore, the EMBRYO platform is still sparking the interest of different areas of research, leveraging scientific development. You can access and become a scientist collaborator at www.facebook.com/embryoigemufmg.

Unemployment rises at traditional pharmaceutical industry

In two years, the number of employees in the traditional pharmaceutical industry fell about 30% in Brazil. **Page 2**

XXV Biennial - World Health Organization’s meeting to discuss GMOs

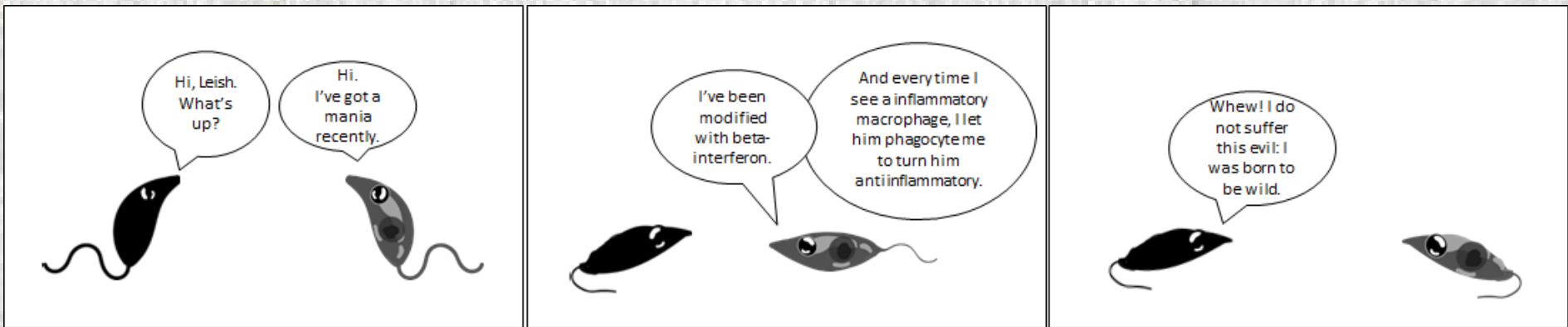
“Relieving the Health Crisis: Update on Rio de Janeiro’s Infrastructure Projects” will be held from 8:00 a.m. to 5:30 p.m. on Friday, August 19, at the Copacabana Palace. **Page 4**

X World Leishmaniasis Free Jamboree

About 70,000 people are expected to celebrate leishmaniasis immunity this weekend. **Page 5**

Protest against GMOs

"March Against E-bola" signed for "Natural Life 4 All" and "Our Safety is Our Right". **Page 4**



The fighter Carl “The Axe” fails in the anti-doping test at UFC 890

by Clara Guerra and Rodrigo Baptista

The American fighter Carl “The Axe”’s pre-examination tested positive for the presence of a genetically modified *Leishmania* in his blood. This Genetically Modified Organism (GMO) is well known for being commonly used to improve an athlete's joints performance.

In the collective press that happened at Bellagio Casino in Las Vegas, Max Man-Ager, the fighter’s manager read Carl’s’ statement, justifying the positive result:

"I have been competing in this sport for a very long time. I have been thoroughly tested many times and have never had a positive test! This just happened because I had a problem a long time ago with my knee joint. And this was just a treatment holdover."

At the end of the collective press, Mr. Man-Ager was confronted with the fact that the type of GMO “The Axe” claimed he had used for treatment cannot survive in humans organisms for such a long time. The manager only replied that they already contacted lawyers and will present the previous treatment evidences to remove the false accusations. While the case is not solved, Carl “The Axe” must pay a U\$ 100,000.00 fine to the Ultimate Fighter Championship.

The International Athletics Federation (IAF), announced that 28 athletes had been caught in doping tests since GMOs used for human treatment were created, in 2015. The first use of this modified *Leishmania* was to produce in situ drugs for the treatment of inflammatory joint disease, but athletes began to benefit themselves of the anti-inflammatory effect to improve their performance. This kind of doping has become common in some sports since then.

The IAF analyst, Mr. Eric Tosu Ave, justified why this kind of doping is happening in sports: “This is because doping through GMOs are difficult to be detected by conventional tests. The drug is synthesized only in minute amounts right on the spot where they are needed. To cope with this, we are now investing in more precise diagnostic tests, capable of detecting femtograms of the prohibited substances as well as traces of the GMO’s. We aim to fight fire against fire.”

Two Leishmania Centrin I-knockout batches presented problems and need recall

by Natália Souza

The Brazilian Health Surveillance Agency ruled this Wednesday the suspension of two lots of the genetically modified Leishmania commonly used for inflammatory joint diseases treatments. According to the government, both batches of the suspended product LeishMove™ will be collected by the manufacturers.

The 1998178 and 1998179 lots (expiry 11/2025) were suspended following a complaint made to the authorities. A consumer reported some of the visceral leishmaniasis symptoms after using the product for a few weeks. However, the diagnosis was not confirmed to this date.

According to the agency, the manufacturer has initiated the voluntary recall of the batch, which was distributed in five Brazilian states. The manufacturer sent a warning through the main media vehicles and promised they will compensate those affected.

Unemployment rises at traditional pharmaceutical industry

by Carlos Gonçalves and Clarissa Lopes

In just the past two years, the number of employees in the traditional pharmaceutical industry fell about 30% in Brazil, according to the Brazilian Pharmaceutical Industry Association.

The fall in the number of employees is due to the combination of two factors: 1) rising unemployment caused by the economic crisis, and 2) high profitability of the pharmaceutical industry specialized in GMOs' drug production.

The new treatments available today based on GMOs are among the main causes of unemployment in this part of the pharmaceutical sector, and the number of new organisms designed to treat numerous diseases continues to raise.

The pharmaceutical employee's syndicate is organizing several protests against the GMOs' industries, planning to block the main city avenues and intercede customers in front of pharmacies. Unfortunately, a radical faction of employees have turned to illegal tactics, such as invading distribution centers to burn the supplies of medicines based in GMOs and even attacking employees from GMOs industries. The police's authorities are already prepared to deal with these eventual problems.

Although there is no in-depth study on the consequences on the market, it is estimated that by the end of the year about 10% of the vacancies in traditional companies will be extinguished.

HIV virus can now revert acute myeloid leukemia!

by Iria dos Santos

A new project from the EMBRYO platform is finally coming out from the Labs and being applied in hospitals as a revolutionary treatment to leukemia.

After a long time discussing the project's safety, working on the local legislation, and facing public's mistrust in using such an emblematic pathogenic chassi, the genetically modified strain of HIV virus was finally approved by the Brazilian Health Surveillance Agency (ANVISA), and will soon be available in hospitals. This is the first time that a scientists-society collaboration project achieve marketability.

The Brazilian Association of Leukemia and Lymphoma (ABRALE) updated in their site a commemorative post congratulating the platform and released a video containing several patients saying "Obrigado!" (portuguese for "Thank you!"), which has reached approximately 10 million views in just one day.

Patients are expected to begin the treatment by the end of November, and their doctors must send a trimestrial report to the EMBRYO team and to ANVISA.

XXV Biennial - World Health Organization's meeting to discuss GMOs

by Cristiane Toledo

“Relieving the Health Crisis: Update on Rio de Janeiro’s Infrastructure Projects”, an event focusing on four high-profile proposals that aimed the drugs production increase with a safe use of Genetically Modified Organisms (GMOs) will be held from 8:00 a.m. to 5:30 p.m. on Friday, August 19, at the Copacabana Palace.

Hosted by the World Health Organization (WHO), the program will feature speakers representing each one of the projects. They will discuss different proposals to increase the drugs production and to reduce the costs by using safer GMOs.

According to WHO President Thomas Daldry, creating new supply sources could be a key to decrease medicines prices and combat diseases more efficiently.

Protest against GMOs

Protesters rallied in dozens of cities last Sunday as part of a global protest against E-bola, the company that monopolizes the manufacture and sales of medicine that corrects cystic fibrosis by implanting a modified Ebola virus into the host system.

"March Against E-bola" protests were held in 30 countries and 674 cities, including Belo Horizonte, where demonstrators waved signs that read "Natural Life 4 All" and "Our Safety is Our Right".

Genetically modified virus are engineered to be attenuated, prevent other diseases and increase the global health. Most influenza and poliovirus distributed in the Americas today have been genetically modified.

Scientists say that Genetically Modified Organisms (GMOs) can be the solution to various issues, if used wisely. The use of GMOs has been a topic of debate for decades due to fear of harm to the environment and human health, with discussions intensely escalating since the early days of this technology. Even though it is nowadays considered generally safe, with some researchers even claiming they have dominated the technology and ensuring the safety of using GMOs, there are still several groups around the world against this form of Medicine and defending life with less scientific interventions. This critics says that humans should not modify the nature in such a drastic way, and that one can never be completely sure about the safety of the GMOs.

X World Leishmaniasis Free Jamboree

by Lucas Santiago

Next weekend in different world's tropical cities, the X World Leishmaniasis Free Jamboree will be taking place. Since the leishmaniasis eradication ten years ago, some of Brazil's biggest cities, like São Paulo, Rio de Janeiro and Belo Horizonte, as well as cities from other countries, like Bombain and Johannesburg, have an annual big parade to celebrate this achievement.

Leishmaniasis was a disease which, only in Brazil, affected about 3,000 people per year. At that time, a lot of patients and doctors were criticized about the use of this pathogen as part of the LeishMove™ drug delivery system. Some patients using the *Leishmania* protozoan faced different kinds of prejudice and was normal to see TV campaigns addressing this problem.

But during these last years, this has changed when patients treated with this modified *Leishmania* started to show a high level of leishmaniose immunity. And, as the treatment expanded to new science areas, the immunity became very common.

The X World Leishmaniasis Free Jamboree parade will occur in next Sunday morning. In Belo Horizonte, the authorities are expecting 70,000 people to join the parade.